

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Non-Final Office Action dated January 22, 2008, has been received and its contents carefully reviewed.

By this response, claims 1, 3, 6, 13, 16-17, 28-31, and 37-38 have been amended and claims 15 and 32-36 have been canceled. No new matter has been added. Claims 1-14, 16-31 and 37-38 are pending in this application. Reconsideration and withdrawal of the rejections in view of the above amendments and the following remarks are respectfully requested.

In this Office Action, claims 1-2, 4, 6-9, 11, 13-20, 22, 24, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,745,207 to Asada et al. (hereinafter "Asada"). Applicant respectfully traverses the rejection because Asada does not teach or suggest the features recited in the claims of the present application. In particular, Asada fails to teach or suggest a liquid crystal display including a pixel electrode "having a first plurality of protrusions and a first plurality of indentations, wherein each of the first plurality of protrusions includes a first flat zone and first edges at opposite sides of the first flat zone; and a common electrode on the substrate, the common electrode having a second plurality of protrusions and a second plurality of indentations, wherein each of the second plurality of protrusions includes a second flat zone and second edges at opposite sides of the second flat zone, wherein a horizontal distance is substantially perpendicular to the length of the pixel electrode and wherein a first horizontal distance between each of the first edges and each of the second edges is less than a second horizontal distance between each of the second plurality of indentations and each of the first plurality of protrusions", as recited in independent claim 1 of the present application.

Asada further fails to teach or suggest a liquid crystal display including "first and second electrodes on the first substrate, wherein the first electrode has a first plurality of protrusions and a first plurality of indentations, wherein each of the first plurality of protrusions includes a first flat zone and first edges at opposite sides of the first flat zone, wherein each of the second plurality of protrusions includes a second flat zone and second edges at opposite sides of the second flat zone, and wherein a horizontal distance is substantially perpendicular to the length of the first electrode and wherein a first horizontal distance between each of the first edges and each of the second edges is less than a second horizontal distance between each of the second plurality

of indentations and each of the first plurality of protrusions”, as recited in independent claim 6 of the present invention.

Asada fails to teach or suggest a liquid crystal display including “a first electrode alternating a first plurality of indentations and a second plurality of protrusions, wherein each of the first plurality of protrusions includes a first flat zone and first edges at opposite sides of the first flat zone and a second electrode spaced apart from the first electrode and alternating a second plurality of indentations and a second plurality of protrusions, wherein each of the second plurality of protrusions includes a second flat zone and second edges at opposite sides of the second flat zone, wherein a horizontal distance is substantially perpendicular to the length of the first electrode, wherein a horizontal distance between each of the first edges and each of the second edges is less than a horizontal distance between each of the second plurality of indentations and each of the first plurality of protrusions, and wherein a side portion between each of the first edge and a bottom of each of the first plurality of indentations is inclined”, as recited in independent claim 13 of the present invention.

Asada fails to teach or suggest a liquid crystal display including “first and second electrodes on the first substrate, wherein the first electrode alternates a first plurality of indentations with a first plurality of protrusions, wherein each of the first plurality of protrusions includes a first flat zone and first edges at opposite sides of the first flat zone, wherein a second electrode alternates a second plurality of indentations with a second plurality of protrusions, wherein each of the second plurality of protrusions includes a second flat zone and second edges at opposite sides of the second flat zone, wherein a horizontal distance is substantially perpendicular to the length of the first electrode, wherein the first and second plurality of protrusions and indentations include first and second inner indentations and protrusions, respectively, such that the first inner indentations and protrusions are opposite to a side of the second electrodes having the second inner indentations and protrusions such that a horizontal distance between each of the first edges and each of the second edges is less than a horizontal distance between each of the second plurality of indentations and each of the first plurality of protrusions, and wherein a side portion between each of the first edge and a bottom of each of the first plurality of indentations is perpendicular to the first electrode”, as recited in independent

claim 16 of the present invention. Accordingly, the independent claims 1, 6, 13 and 16 and their dependent claims are not anticipated by Asada.

In the Office Action, claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,075,582 to Onnagawa (hereinafter "Onnagawa") in view of U.S. Patent No. 5,598,285 to Kondo (hereinafter "Kondo"). Applicant respectfully traverses the rejection because neither Onnagawa nor Kondo, analyzed alone or in any combination, teach or suggest the combined features recited in claims of the present application.

Onnagawa and Kondo fail to teach or suggest a liquid crystal display including a pixel electrode "having a first plurality of protrusions and a first plurality of indentations, wherein each of the first plurality of protrusions includes a first flat zone and first edges at opposite sides of the first flat zone; and a common electrode having a second plurality of protrusions and a second plurality of indentations, wherein each of the second plurality of protrusions includes a second flat zone and second edges at opposite sides of the second flat zone, wherein a horizontal distance is substantially perpendicular to the length of the pixel electrode and wherein a first horizontal distance between each of the first edges and each of the second edges is less than a second horizontal distance between each of the second plurality of indentations and each of the first plurality of protrusions", as recited in independent claim 1 of the present application.

Onnagawa and Kondo fail to teach or suggest a liquid crystal display including "first and second electrodes on the first substrate, wherein the first electrode has a first plurality of protrusions and a first plurality of indentations, wherein each of the first plurality of protrusions includes a first flat zone and first edges at opposite sides of the first flat zone, wherein each of the second plurality of protrusions includes a second flat zone and second edges at opposite sides of the second flat zone, and wherein a horizontal distance is substantially perpendicular to the length of the first electrode and wherein a first horizontal distance between each of the first edges and each of the second edges is less than a second horizontal distance between each of the second plurality of indentations and each of the first plurality of protrusions", as recited in independent claim 6 of the present invention.

Onnagawa and Kondo fail to teach or suggest a liquid crystal display including "a first electrode alternating a first plurality of indentations and a second plurality of protrusions, wherein each of the first plurality of protrusions includes a first flat zone and first edges at

opposite sides of the first flat zone and a second electrode spaced apart from the first electrode and alternating a second plurality of indentations and a second plurality of protrusions, wherein each of the second plurality of protrusions includes a second flat zone and second edges at opposite sides of the second flat zone, wherein a horizontal distance is substantially perpendicular to the length of the first electrode, wherein a horizontal distance between each of the first edges and each of the second edges is less than a horizontal distance between each of the second plurality of indentations and each of the first plurality of protrusions, and wherein a side portion between each of the first edge and a bottom of each of the first plurality of indentations is inclined”, as recited in independent claim 13 of the present invention.

Onnagawa and Kondo fail to teach or suggest a liquid crystal display including “first and second electrodes on the first substrate, wherein the first electrode alternates a first plurality of indentations with a first plurality of protrusions, wherein each of the first plurality of protrusions includes a first flat zone and first edges at opposite sides of the first flat zone, wherein a second electrode alternates a second plurality of indentations with a second plurality of protrusions, wherein each of the second plurality of protrusions includes a second flat zone and second edges at opposite sides of the second flat zone, wherein a horizontal distance is substantially perpendicular to the length of the first electrode, wherein the first and second plurality of protrusions and indentations include first and second inner indentations and protrusions, respectively, such that the first inner indentations and protrusions are opposite to a side of the second electrodes having the second inner indentations and protrusions such that a horizontal distance between each of the first edges and each of the second edges is less than a horizontal distance between each of the second plurality of indentations and each of the first plurality of protrusions, and wherein a side portion between each of the first edge and a bottom of each of the first plurality of indentations is perpendicular to the first electrode”, as recited in independent claim 16 of the present invention.

Applicant respectfully submits Onnagawa merely discloses “the spaces (L) between the respective scanning electrodes or between the respective opposed electrodes in the respective picture element domains are dependently 20 to 200 μm . More preferably, the spaces(L) between the respective scanning electrodes or between the respective opposed electrodes in the respective picture element domains are dependently 40 to 150 μm .” (See, col. 5, lines 13-19). However,

Onnagawa does not teach the above structural relationship recited in independent claims 1, 6, 13 and 16 of the present application. Specifically, the horizontal distance between the common and pixel electrode in Onnagawa is constant. As such, no combination of Onnagawa and Kondo would provide a liquid crystal display device having the combined features recited in independent claim 1, 6, 13, and 16 and their dependent claims 2-5, 7-12, 17-31 and 37-38. Accordingly, claims 1-14, 16-31 and 37-38 are allowable over Onnagawa and Kondo. Reconsideration and withdrawal of the rejection are respectfully requested.

Applicant believes the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

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Respectfully submitted,

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